

ATTACHMENT G

federal register

TUESDAY, AUGUST 27, 1974

WASHINGTON, D.C.

Volume 39 ■ Number 167

PART II



ENVIRONMENTAL PROTECTION AGENCY

■

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Prevention of Significant Air
Quality Deterioration

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

[FRL 264-4]

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Prevention of Significant Air Quality Deterioration

On May 31, 1972 (37 FR 10842), the Administrator of the Environmental Protection Agency published initial approvals and disapprovals of State Implementation Plans submitted pursuant to section 110 of the Clean Air Act, as amended in 1970.

On November 9, 1972 (37 FR 23836), all State Implementation Plans were disapproved insofar as they failed to provide for the prevention of significant deterioration of existing air quality. This action was taken in response to a preliminary injunction issued by the District Court for the District of Columbia Circuit, which also required the Administrator to promulgate regulations as to any state plan which either permits the significant deterioration of air quality in any portion of any state, or fails to take the measures necessary to prevent such significant deterioration.

Accordingly, on July 16, 1973 (38 FR 18986), an initial notice of proposed rulemaking was published which set forth four alternative plans for preventing significant deterioration, and which solicited widespread public involvement in all aspects of the significant deterioration issue. Public involvement was considered essential because the issue of what constitutes "significant" deterioration, and what measures should be employed to prevent such deterioration, must be resolved as a public policy issue with full recognition and consideration of its potential social and economic as well as environmental implications. This balancing of the social and economic considerations with the environmental implications is considered necessary to fulfill the mandate of the Clean Air Act to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." (Emphasis added)

The specific regulations therein are a modification of the originally proposed area classification plan, and are being repropounded to focus attention and solicit comment on the detailed procedural and technical aspects prior to promulgation to correct the deficiencies in State Implementation Plans outlined in the disapproval notice on November 9, 1972. These regulations would be implemented by the States pursuant to the authority contained in the Clean Air Act, as amended. Under the Act the Administrator is authorized to implement and enforce the regulations in cases where States are unwilling to request or accept the delegated authority.

To facilitate development of State plans to implement the general policy set forth in these regulations, in the near

future the Administrator intends to publish guidelines for the preparation, adoption, and submittal of State Implementation Plan provisions with respect to the prevention of significant deterioration (40 CFR 51). These additional guidelines will provide criteria for submission of State plans to prevent significant deterioration. The State plans need not be identical to the regulations proposed herein, but should be developed to accommodate more appropriately individual conditions and procedures unique to specific State and local areas. States are urged to develop and submit individual plans as revisions to State Implementation Plans as soon as possible. When individual State Implementation Plan revisions are approved as adequate to prevent significant deterioration of air quality, the applicability of the regulations proposed herein will be withdrawn for that State.

ORIGINALLY PROPOSED ALTERNATIVES

In the July 16, 1973, notice of proposed rulemaking (38 FR 18986), the Administrator proposed four alternative plans to prevent significant deterioration of air quality. These plans were intended to define the range of reasonable approaches to the problem and stimulate discussion on appropriate courses of action. The four proposed alternative plans were:

Air Quality Increment Plan—This plan would have prevented significant deterioration of air quality through application of a single nationwide incremental increase in concentrations of total suspended particulate (TSP) and sulfur dioxide (SO₂) over those levels which existed in 1972. The sizes of the increments were selected to balance reasonable economic growth with minimal environmental deterioration.

Emission Limitation Plan—This plan would have limited total emissions of TSP and SO₂ over a relatively large area and indirectly prevented the significant deterioration of air quality. This plan offered some flexibility to States to distribute emissions throughout the area over which the emissions were to be limited.

Local Definition Plan—This plan would have prevented significant deterioration by requiring local determination, on a case-by-case basis, of the significance of the air quality impact of major new sources. This plan recognized the variability between areas and called for a subjective decision making procedure to be implemented at the local level.

Area Classification Plan—This plan called for the establishment of "zones" of different allowable incremental increases in TSP and SO₂. "Zone I" allowed for a very small incremental increase which would permit almost no new heavy industrial growth using current technology. "Zone II" used the same increment as in the Air Quality Increment Plan and allowed for what the Administrator considered a reasonable mix of well planned and sited construction. The plan also included provisions wherein individual

areas could experience deterioration up to the national standards. At the time of proposal the Administrator recognized that this plan appeared to be superior to the others.

All four proposed plans would have been implemented through a preconstruction review of sixteen specified source categories to determine whether or not these sources would cause a violation of the constraints of each plan. Also, each plan called for application of best available control technology on all new sources covered by the regulations.

ACTIVITIES SINCE PROPOSAL

The proposal to prevent significant deterioration of air quality has stimulated a considerable amount of interest throughout the country. To encourage a complete dialogue, the Administrator initiated several subsequent activities to evaluate more fully the broad range of social and economic implications involved. Among the principal activities undertaken were:

Public Hearings—Public hearings were held in Washington, D.C. on August 27, 28, and 29; in Atlanta, Georgia on September 4 and 5; in Dallas, Texas on September 5 and 6; in Denver, Colorado on September 5, 6, and 7; and in San Francisco, California on September 5 and 6. Over 160 people made presentations at these hearings, and the hearing records are available for inspection at the Freedom of Information Office, Environmental Protection Agency, 401 M Street, S.W., Washington, D.C.

Public Comments—A 90-day public comment period was conducted during which over 300 written comments were received. Many of these comments were quite detailed, and demonstrated a great deal of understanding and concern with both the private and industrial sectors. All public comments received are available for inspection at the Freedom of Information Office.

Additional Consultations—Because of their involvement with and special understanding of the difficult problems related to implementation of any policy to prevent significant deterioration of air quality, the Administrator and his staff have consulted with a variety of individuals and groups which have a special interest in, or knowledge of, the pertinent factors associated with these regulations. Included in these consultations have been State governors and their official representatives, mayors and their official representatives, representatives from local governmental agencies, members of Congress and Congressional staff members, State and local air pollution control officials, representatives of environmental groups, representatives of industry and commerce, and officials of other Federal agencies.

The Administrator feels that the outcome of these efforts has been to stimulate a complete, open and frank dialogue on all aspects of the issue of significant air quality deterioration. As stated in the proposed rulemaking, there is perhaps no other environmental issue that imposes

upon the Administrator a greater obligation to develop fully all points of view and relevant facts. The review of public comments and hearing testimony, the extensive consultations, and the many additional studies and analyses undertaken and evaluated have resulted in valuable information which has been used in formulating the regulations proposed herein.

These regulations are in the form of a proposal because, due to the lack of precise direction either in the Clean Air Act or in the Court order, the thrust of the initial proposals was to focus on the conceptual basis for regulations. The comments received on the proposed regulations therefore tended primarily to discuss conceptual issues such as the roles of federal and state/local governments, rather than detailed comments regarding implementation of the regulations. Accordingly, the Administrator feels that a reappraisal of the regulation enclosed herein is essential to properly explore all aspects of this issue and to focus more clearly on procedural and technical issues. The Administration has submitted for consideration an amendment to the Act which would eliminate this requirement. This amendment is pending before the Congress. Although EPA does not agree with this amendment, EPA urges that it be given the fullest consideration and proposes the present regulations at this time without any intent to delay or influence such full consideration. The proposal herein is necessary because the Court has ruled that the current Clean Air Act requires the Administrator to prevent significant deterioration, and this requirement must be met even though it is possible that Congress may provide additional guidance and/or legislative changes in the future.

CONCEPTUAL CONSIDERATIONS

In the notice of proposed rulemaking, attention was drawn to the fact that any plan to prevent significant deterioration of air quality might have a major influence on land use patterns in many areas of the country. The development of proper land use planning to ensure protection of the environment is one of the most important tasks yet to be undertaken. Comprehensive land use planning is a complex process including many variables, only one of which is air quality. Development of land use plans in which air quality represents a single overriding criterion is not, in the Administrator's judgment, a desirable course of action for most areas. The regulations proposed below are therefore designed to inject consideration of air quality as one of many constraints on land use decisions, but not to mandate land use decisions based solely on air quality. In this regard, the "significance" of any air quality deterioration is defined in terms of the proper and desired use of an area as well as the magnitude of pollutant concentrations. The intent is not to restrict or prohibit economic growth, but rather to ensure that desirable growth is planned and managed in

a manner which will minimize adverse impacts on the environment.

As was pointed out in the initial proposed rulemaking, determination of that level of deterioration which constitutes "significant" deterioration is basically a subjective decision, because the primary and secondary National Ambient Air Quality Standards are required to be protective of all known adverse effects on public health and welfare in a nationwide context. Response to the initial proposed rulemaking confirmed that consideration of varying social, economic, and environmental factors in different areas would result in varying definitions of what constitutes significant deterioration. None of the information received during the public comments period would enable the Administrator to justify any but a subjective method for defining when increases in the concentration of pollutants become "significant." Strong sentiment was expressed at public hearings, in written comments, and during consultations that States and localities should be given the maximum degree of flexibility in making judgments as to when increases in concentrations become "significant," because the judgments must be based on considerations which vary from locality to locality.

Stemming from concern over the impact of regulations to prevent significant deterioration on land use patterns, and the necessarily subjective nature of any determinations in this regard, the roles of Federal, State and local governments are very important. Any policy to prevent significant deterioration involves difficult questions regarding how the land in any area is to be used. Traditionally, these land use decisions have been considered the prerogative of local and State governments, and in the regulations promulgated herein, the primary opportunity for making these decisions is reserved for the States and local governments. The States, acting pursuant to federal regulations, would exercise the authority to prevent significant deterioration of air quality, and this authority could be delegated to the local level if desired. In the Administrator's judgment, this matter normally should not be handled at the Federal level, but should become a matter for discussion and decision making at a governmental level in close contact with the area. However, if States are unwilling to accept this delegation of authority, the Administrator is prepared to implement and enforce these regulations in order to prevent significant deterioration of air quality. Further, even in cases where States fully accept the delegated authority, the Administrator may review, within very narrow limits, certain decisions made pursuant to these regulations.

The Clean Air Act places primary responsibility for the prevention and control of air pollution on the States and local governments. Accordingly, several broad options are available to States in designating an agency to exercise the authority which would be exercised pursuant to these regulations. One option would be to place responsibility for these regulations in a State-level agency; an-

other option would be to assign responsibility to appropriate units of local government; a third would be to assign responsibility to a regional planning or multi-functional agency.

Because of the impact these regulations may have on land use, the Administrator encourages the States, wherever possible, to delegate substantial authority under these regulations to appropriate local governmental units. Such delegation should be subject to appropriate conditions (such as effective and coordinated review on the appropriate regional scale, citizen involvement, ultimate control by general purpose local governments, etc.). Additionally, the Administrator encourages States to allow local general purpose governments, subject to similar conditions, to request designation of a local government body as the reviewing authority. If a State chooses to exercise authority at the State level, the Administrator encourages States to consult with all affected local governmental units carrying out these regulations. However, the Administrator emphasizes that the ultimate responsibility for assuring successful implementation of these regulations would lie with the State; if a State cannot or does not desire to implement the regulations herein, the Administrator would perform or delegate these responsibilities.

Because of the many inherent interrelationships between State efforts to prevent significant deterioration of air quality under these regulations and other state activities related to planning for land use, development, and environmental quality, special efforts to enhance intergovernmental coordination must be effected in each state. The regulations require consultation between the agency designated by the Governor to implement this effort and other relevant agencies. If the unit designated is not an air pollution control agency, the designated unit must consult with the air pollution control agency; similarly, if the designated unit does not have continuing responsibilities for land use planning, it must consult with the appropriate state and/or local land use planning agencies. In this context, "land use planning agency" is to be construed quite broadly to include economic development or regional planning entities whose activities and responsibilities are appropriate to the specific decisions being made under these regulations.

Furthermore, coordination among other planning procedures, requirements, and agencies is encouraged to the maximum extent possible, particularly with respect to designation or re-designation of areas under these regulations. In particular, the agency designated by the Governor in carrying out its area classification responsibility should ensure coordination with the following four processes as appropriate to the specific state/local setting:

An Air Quality Maintenance Plan and its decision-making procedures.

An areawide waste treatment management unit created under Section 208 of

the Federal Water Pollution Control Act (FWPCA).

The A-95 Review Process.

The Environmental Impact Statement under the National Environmental Policy Act (or equivalent State requirement).

Many areas designated Class III under these regulations would have the potential to exceed national ambient air quality standards during the 1975-1985 period. This will require that they be designated Air Quality Maintenance Areas (AQMA's). In these areas coordination between implementation of these significant deterioration regulations and the Air Quality Maintenance Plan effort will be particularly important.

Section 208 of the FWPCA provides for designation of certain portions of a water basin as requiring areawide waste treatment management. These are areas having a water quality control problem that cannot be alleviated without an areawide approach aimed at integrating controls over municipal and industrial waste water, storm sewer runoff, nonpoint source pollutants, land use, and growth. The 208 planning agency must be a representative organization whose membership includes but is not limited to elected officials of local governments having jurisdiction in the planning area. Activities of these agencies involve projections of land use and growth patterns and control over new growth as necessary to ensure attainment and maintenance of water quality standards. Their decisions may affect locations of the 19 source categories covered in these significant deterioration regulations. Concepts and approaches developed in such water planning/land use analyses should be related to appropriate decisions in the significant deterioration effort.

The review process established under Office of Management and Budget Circular No. A-95 provides a structure for coordinated planning by strengthening communication among different agencies and governmental levels. This review process has potentially wide applicability through State, regional, and metropolitan clearinghouses that administer the review and comment process. The A-95 process can be regarded as a step toward regional comprehensive planning. Although the A-95 process is required when Federal grants and funds are involved, it could be utilized as an appropriate structure for inter-governmental coordination during the area classification and reclassification phases of implementing these regulations.

Section 102(2)(c) of the National Environmental Policy Act of 1969 requires an Environmental Impact Statement (EIS) to be filed with the Council on Environmental Quality by Federal agencies proposing major projects. The relationship of the proposed action to land use plans, policies, and controls in the project area and how conflicts with Federal, State, and local land use have been resolved must be discussed. Although an EIS is only required with respect to major Federal actions, some State laws impose similar requirements on private develop-

ments. Twelve States and Puerto Rico have adopted broad requirements for EIS's on State actions; similar requirements have been under consideration in another 21 States and the District of Columbia. State EIS requirements are, for the most part, modeled on section 102(2)(c) of NEPA. However, significant differences exist from State to State. Some apply EIS's to local, as well as to State agencies; some require EIS's for private actions for which a government permit is required. Federally required EIS's are coordinated through the appropriate State, regional, or metropolitan A-95 clearinghouses discussed above. The EIS process may be useful in State decisions on the merits of re-classifying an area.

TECHNICAL CONSIDERATIONS

Potential Economic Impact. The requirement to prevent significant deterioration does not mean that economic growth of undeveloped areas must be arbitrarily restricted. Several studies by EPA and other Federal agencies, and additional data contained in public comment, have evaluated various aspects of the proposed plans. The studies were characterized by two basic approaches: analysis of impact in specific prototype regions and analysis of impact on isolated new industrial and energy-related sources. Copies of the analyses and contract reports are available for public inspection at the EPA Freedom of Information Office.

Based on these studies, the Administrator has concluded that the restriction of deterioration of air quality proposed for Class II areas in the regulations here would be unlikely to prevent what, in the Administrator's judgment, represents most forms of normal growth and economic development, provided that reasonable siting practices and pollution control measures are employed. However, unusually high growth urban areas, and some large industrial operations, could be adversely impacted if constrained by the increment of the original Air Quality Increment Plan. In many areas, the limitations proposed under the original Emission Limitation Plan could adversely restrict economic growth: this restriction would be most severe for coal-fired power plants. However, it must be emphasized that results of analyses such as these are sensitive to the assumptions made as to individual site locations, facility configuration, meteorological conditions, etc., and changes in these assumptions for any specific analysis could result in major changes in the results.

Many public comments expressed concern that any regulations to prevent significant deterioration of air quality inherently must have a major adverse impact on all forms of growth and economic development, especially in regard to the development of energy-related sources. However, the available analyses have confirmed that the incremental increases in concentration allowed under the Air Quality Increment Plan (Similar to Class II in the regulations proposed herein) would not necessarily

create this adverse impact under most conditions, although in the regulations proposed herein, the 3-hour increment for sulfur dioxide has been increased to ensure that it is no more stringent than the 24 hour increment for large point sources under most meteorological and terrain conditions.

Subsequent to the close of the formal comment period on the original proposal, concern was expressed by the Department of Commerce and the Federal Energy Administration regarding the appropriateness of the Class II increments, particularly to the extent that the Class II increments might restrict construction of new coal-fired power plants and other economic growth in Class II areas. The Class II increments have been established at a level such that, in the judgment of the Administrator, deterioration above that level would constitute a significant deterioration in most areas of the country. With reference to coal-fired power plants, the increments would normally permit construction of new power plants with capacities ranging up to approximately 1000 megawatts, although there would be wide variations in the actual limiting capacity due to the wide variations in terrain and meteorological conditions. Because the average capacity of new coal-fired power plants is projected to be approximately 1000 megawatts (the average size of existing plants is approximately 300 megawatts) the Administrator continues to believe that the level of the Class II increments is appropriate. This level would require that new plants of greater than average capacity normally be located only in Class III areas. Further, typical coal gasification facilities, oil shale processing facilities, and petroleum refineries would not be expected individually to exceed the Class II increments in most areas. However, large concentrations of new industrial sources and large new pollution-prone facilities, particularly those which may lead to new development in the vicinity, would in many cases be permitted only in Class III areas under the regulations proposed herein. The Federal Energy Administration, the Department of Commerce and the Treasury Department have specifically suggested that the incremental levels set forth in the proposed regulations be doubled, and that doing so would still adequately protect Class II areas against significant deterioration. Due to the concern so expressed, the Administrator specifically solicits comments on the desirability of increasing the level of the Class II increments proposed herein.

The Department of Health, Education, and Welfare has expressed two major concerns about the enforcement of air quality levels more stringent than the existing primary and secondary ambient standards. First, it fears adverse health impacts if metropolitan areas which now exceed even the primary standards are delayed in their attainment of those standards by their inability to shift pollution sources to outlying areas. Second, the Department is concerned that a disproportionate share of the costs and few

of the benefits of the non-deterioration policy would accrue to persons of limited economic means and residential mobility. These persons would be particularly vulnerable to such adverse impacts as curtailed economic growth, altered urban and rural development trends, constrained national capacity to absorb anticipated population increases, and higher prices for energy and manufactured goods. These impacts could compound the difficulties faced by all levels of government in responding to the needs of the poor, the elderly, racial minorities, and persons otherwise disadvantaged. The Administrator recognizes the concern expressed by the Department of Health, Education, and Welfare that adverse impacts could accrue to persons of limited economic means and residential mobility. Specific comments are solicited on this issue, with emphasis on any factual data relative to the issue. However, it is emphasized that there is no feature in these proposed regulations which would authorize any delays in attainment of the national standards in any area, irrespective of how that area, or any other area, would be classified under these proposed regulations.

Data Considerations. The following information is based on data collected by EPA and supported by public comment. The background information to support these conclusions is available for inspection at the EPA Freedom of Information Office.

1. Measurement Accuracy: Although the federal reference method for suspended particulates is adequate for use in measuring the extremely small increments often associated with prevention of significant deterioration, the federal reference methods for other criteria pollutants at low (clean environment) concentrations suffer varying degrees of inadequacy in that the precision of the current methods is not adequate to reliably distinguish between readings approaching the small increments proposed. For example, if a twenty-four hour reading for sulfur dioxide were 100 $\mu\text{g}/\text{m}^3$, the actual twenty-four hour average can be expected to lie between 53 $\mu\text{g}/\text{m}^3$ and 147 $\mu\text{g}/\text{m}^3$, which is comparable to the 100 $\mu\text{g}/\text{m}^3$ increment proposed for the Air Quality Increment Plan. Extensive modification of existing methods, or development of new measurement technology, would be required in order to precisely measure the increments as proposed. However, current instrumentation would be adequate to calibrate and improve current diffusion modeling techniques and to measure compliance with ambient air quality standards.

2. Air Quality Data: Monitoring data on suspended particulate concentrations are the only data extensive enough in clean areas to support meaningful analyses. The major conclusion which can be drawn from these data is that vast numbers of measurements would be required to precisely determine a baseline level, and then further extensive measurements would be required to establish any degree of deterioration from that level.

3. Data Variability: Normal random variations in pollutant concentration in clean areas, especially for particulate matter, are often of greater magnitude than the incremental increases proposed for use under the original Air Quality Increment Plan. For example, the 1968 maximum concentration at the Grand Canyon for particulates was 126 $\mu\text{g}/\text{m}^3$ and the annual average was 31 $\mu\text{g}/\text{m}^3$. In 1969 the maximum concentration was 32 $\mu\text{g}/\text{m}^3$ and the annual average was 17 $\mu\text{g}/\text{m}^3$. These differences were caused by random variations due primarily to normal meteorological factors, and exceeded the allowable air quality increments proposed in the original Air Quality Increment Plan.

4. Modeling and Simulation Accuracy: Current diffusion modeling techniques, when uncalibrated and used in the absence of baseline air quality data, can exhibit random errors as high as a factor of two for short term concentrations and a factor of 1.5 for annual averages when compared with known concentrations of pollutants. It should be noted that in assessing most average concentrations, particularly those resulting from multiple sources, significantly better accuracy can be obtained. However, this is not the type of application normally associated with the significant deterioration concept which calls for pre-construction review of individual new sources. It should also be noted, however, that data obtained from current diffusion modeling techniques, while not corresponding to actual conditions in the ambient air, do provide a consistent and reproducible guide which can be used in comparing the relative impact of a source.

Based on these factors concerning the reliability of available field instrumentation and the normal variability of air quality data, it is the Administrator's judgment that a measured incremental increase in concentration over a measured baseline normally cannot be used as the criterion in assessing the significance of a new facility's impact on air quality. However, the use of diffusion modeling as an indicator of a source's compatibility with the land use desires of an area is a valid use of such models.

Most public comments concurred that measured data should not be used as the sole criterion for assessing the incremental increase. Some comments have disputed it, but a review of studies cited in those comments has shown that the measurement methods employed in these studies are quite complex and expensive, and require highly skilled operators and subsequent detailed analysis. These procedures are not currently suitable for the type of widespread field use required to prevent significant deterioration on a nationwide basis.

SUMMARY OF REGULATIONS

The regulations proposed herein represent a modification to the Area Classification Plan as proposed in 38 FR 18986. As proposed, the regulations incorporate four basic features:

1. Provisions are made whereby areas would be designated under three classi-

fications: Class I applies to areas in which practically any change in air quality would be considered significant; Class II applies to areas in which deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to those areas in which deterioration up to the national standards would be considered insignificant.

2. The impact of a proposed new source on the applicable "deterioration increment" would be assessed through conventional new source review procedures (i.e., a pre-construction review) applied to proposed facilities in nineteen specific major source categories. The impact of smaller sources and area sources would be included in the "deterioration increments" at the time of review for construction or expansion of one of the specified source categories.

3. The "deterioration" increments in Class I and II areas are firm ceilings which cannot be exceeded by any new major source. However, procedures are included so that areas, both large and small, can be reclassified to allow introduction of sources not compatible with the initial classification, in cases where it is determined that the resulting deterioration would not be "significant".

4. Although the determination of what constitutes "significant" deterioration is intended to be made by the State under these regulations, the Administrator retains review authority over certain State actions.

The regulations as proposed herein take the same general form as the proposed Area Classification Plan, and in the subsequent discussion only the major changes are emphasized.

Sources Subject to the Regulations. The list of sources subject to review has been expanded to include three additional source types—fuel conversion plants (such as coal gasification and oil shale plants), primary lead smelters, and sintering plants. The requirement for review of all sources with potential emission rates in excess of 4,000 tons/year has been deleted because the requirement generally is superfluous.

It is important to note that in this type of approach it is not possible to conduct a pre-construction review of each small source (such as a private home), but rather to concentrate the effort on the important large sources. These regulations do not require pre-construction review of sources other than those specifically listed, but require that these large sources, for which pre-construction review will be carried out, consider the impact of small sources constructed since the effective date of these regulations in determining their incremental impact and comparing it to the allowable increment. This provision is not intended to restrict the activities of States in development of their own source lists for State plans to prevent significant deterioration.

The term "expanded source" has been defined in these regulations in order to avoid possible confusion with the more commonly used term "modified source".

An expanded source is defined as one which intends to increase production through a major capital expenditure. This term deliberately excludes from review under these regulations any fossil fuel-fired electric power plant which increases emissions solely due to switching from a low sulfur to a higher sulfur content fuel. Fuel switching by power plants is being adequately handled under existing federal and state controls, and to impose additional federal controls on these plants would be inconsistent with the recently enacted Energy Supply and Environmental Coordination Act.

The Energy Supply and Environmental Coordination Act of 1974 was not intended to resolve the significant deterioration issue. Nevertheless, it was intended to permit a mechanism by which EPA's Clean Fuels policy could be implemented to the extent that States agree to do so. Accordingly, it would be inappropriate for these proposed regulations to inhibit fuel switching due to a federally imposed "Deterioration Increment," even though all States would have the opportunity to reclassify to a higher classification. It should be noted, however, that States generally do retain the option to inhibit or prevent fuel switching at their discretion.

In actual practice, the regulation proposed herein would permit a power plant which switches fuel to "use up" the entire available deterioration increment, and in some cases exceed the increment, thereby precluding introduction of other major sources in the area unless the area is reclassified.

Area Classification Procedures. The concept of classifying increases in air quality has been only slightly modified from the earlier proposal. The allowed incremental increases in Class I areas are identical to those in the proposed "Zone" I. The allowed increases in Class II areas are similar to those of the proposed "Zone" II: The 3-hour increment has been increased to insure that it is no more stringent than the 24-hour increment under most meteorological and terrain conditions. A Class III area has been specified to formalize the "exception" procedures of the proposed plan. The terminology has been changed from "zoning" to "classification" to avoid confusion with conventional zoning concepts. Under conventional practices, a zone is a relatively small area (e.g., a city block or portion of a county). An area classified under the regulations herein initially would be a much larger area, often consisting of, as a minimum, several large counties. Initial classification of smaller individual areas does not appear feasible because the carryover of pollution from one small area to another could not be adequately controlled.

A Class I designation would involve those areas where almost no change from current air quality patterns is desired. Class II designation would indicate areas where moderate change is desirable but where stringent air quality constraints are nevertheless desired. Class III designation would indicate areas where major industrial or other

growth is desired and where increases in concentrations up to the national standards would be insignificant. The basic purpose of this classification procedure would be to require a conscious decision, made publicly with public input, that the intention of the State and the desire of the local population is to provide for the general type of air quality implied by the classification.

The enclosed regulations would designate all areas as Class II effective upon promulgation. Individual States will have sufficient authority to redesignate any area without need for specific new State enabling legislation. Areas may be redesignated as Class I, II or III by the State (or Federal Land Managers or Indian governing bodies as appropriate) provided that at least one public hearing, at which facts relevant to the area's classification may be presented, is held in the area affected and the Administrator is provided with a summary of the information presented at the public hearing. These designations can be accomplished at any time, and can be modified subsequently by the State in the same manner they were set.

States would be encouraged to perform appropriate redesignations as soon as possible. The initial designation as Class II is intended to represent only a tentative determination of what significant deterioration means in most areas, and is subject to a further determination— which only the States can appropriately make—concerning the economic and other factors that may justify a somewhat different level of deterioration as being "significant."

The Administrator would normally approve any redesignation except in the following four cases: (1) where the required procedures were not followed; (2) where the decision was based on inaccurate technical data; (3) where the redesignation authority has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations; or (4) where a State is unwilling to implement the new source review procedures specified in these regulations. There are no limits on how often an area can be redesignated.

For redesignations of Federal or Indian lands, the normal procedures for States would be modified to be consistent with divisions of authority among Federal, State and Indian governing bodies. Nothing in these regulations would convey authority to States over Federal or Indian lands where such authority is not already present in other statutes, but it is anticipated that cooperative procedures will be developed among interested parties to implement these regulations.

Areas should be considered for redesignation as Class I in cases where the location of any polluting industry within the area is inconsistent with current or planned uses for the area, or where it is desirable to protect the area from any further deterioration because it is one of exceptional scenic or recreational value or is ecologically fragile, or where no further major industrial growth is de-

sired irrespective of the existing air quality.

Although the increments for Class II are larger than for Class I, the allowable deterioration associated with a Class II designation is minor, and the Class II air quality increments are smaller than the random variations in air quality which are normally caused by natural (predominately meteorological) factors. These Class II increments are sufficiently small that they preclude introduction of certain major sources of air pollution, although they do permit introduction of what the Administrator has determined generally represents a reasonable amount of well planned and controlled industry so long as the individual facilities are not unusually large, or are not clustered in one small area.

Areas should be considered for redesignation as Class III where they are intended to experience rapid and major industrial or commercial expansion (including areas in which extensive mineral development is desired), but only in cases where the resulting air quality deterioration would not be considered "significant". In many cases, areas (or portions of areas) which are redesignated as Class III can be expected to satisfy the criteria for designation as an Air Quality Maintenance Area. However, States must ensure that proper consideration is given to maintenance of the national standards in all areas, irrespective of the specific definition given to "significant" deterioration.

It is important to recognize that the area classifications do not necessarily limit current air quality levels or current land use patterns. Instead, the classifications imply the desired degree of change from current levels and patterns. Accordingly, Class III could be applied to a currently pristine area, and Class I could be applied to a less clean area.

The regulations are structured to permit very large areas to initially be redesignated uniformly. The desire for relatively small localities to depart from the general criteria of the surrounding area to allow construction of individual sources which could exceed the incremental increases can be accommodated through the flexibility of the reclassification procedures.

These regulations do not impose new requirements on sources proposed for construction in areas designated as Class III. In these areas, the existing procedures for attainment and maintenance of national standards are intended to prevent "significant" deterioration. Since sources in Class III areas are not subject to review under these regulations, States should take care in their redesignation procedures to ensure that Class III areas are sized and situated in such a manner so as to prevent carryover into adjoining areas which are intended to be restricted to Class I or Class II increments.

Source Review Procedures. Introduction of specified new sources, or major expansion of existing sources, are prohibited in Class I and II areas unless: (1) Best Available Control Technology will be applied on those sources for which new source performance

standards are not applicable, and (2) the applicable increments will not be exceeded. If the air quality impact of a new source plus the impact of all other developments since the date of promulgation is expected to exceed the incremental increase allowed by the area designation, the source must either be denied a permit to construct or, if it is determined that the resulting deterioration would be insignificant in view of the social and economic benefits of the source's construction, the area affected by the source's emissions may be redesignated to a higher numeric designation. Under no circumstances, regardless of the classification of the area, would the regulations permit the approval for construction of a source which may interfere with the attainment of maintenance of any national standard.

In the case where proposed Federal or Indian facilities require review under these regulations, the Administrator will normally retain review responsibility and will consult with the State as appropriate.

Procedures for Maintaining the Increment. The regulations proposed herein specify 1973 air quality, with appropriate adjustments to account for sources approved or constructed prior to promulgation, as the baseline. It is necessary to use 1973 air quality data because later data are not yet available in complete form. However, the availability of actual baseline data in relatively clean areas is of secondary importance in these regulations. As discussed previously, current air quality measurements taken in clean areas show large random variations, and it is unclear how a measured baseline could be meaningful in view of these large random variations in background concentrations.

In actual practice, although the regulations do not specifically preclude the use of measured air quality as a method for assessing the available increment, it is anticipated that assessment of the available increment will normally be accomplished through an accounting procedure whereby modeling results for individual sources will be used to keep track of the available (or "unused") increment as sources and emissions are increased or decreased. Therefore, an accurately measured baseline is not an essential consideration in implementing these regulations although the concept is retained for use in those few situations where it may be desired.

It should be noted that the deterioration increment is conceptually applied to the air quality levels existing on the date of promulgation rather than to a level existing at some time in the past (e.g., 1970 or 1972) as was considered in the original proposal. The effect of prior control activities in the area does not constrain the options available for either restricting or encouraging economic growth. These considerations are incorporated in the subjective decisions which must be made during the area classification deliberations.

Air Quality Monitoring Requirements. In the originally proposed plan, all new

major sources were required to conduct air quality monitoring in their vicinity. This was an essential feature because the proposed plan required that accurate air quality information be available in order to assess the "significance" of subsequent sources.

Under the regulations proposed herein, there is no similar need for such precise air quality information, because the air quality assessment is based primarily upon pre-construction modeling results. Although additional air quality data are nearly always of value, there is no justification for requiring sources to conduct monitoring under these proposed regulations. Therefore, the monitoring requirement has been deleted.

It should be noted that the impacts of sources which are not subject to the review procedures are not necessarily reviewed unless a major source proposes to locate in the area. This feature is necessary because the impact of the very large numbers of very small sources could only be assessed by either modeling or air quality measurement. To model each individual source during an individual pre-construction review would be an extremely laborious task, and the end result would be of questionable accuracy. If air quality measurement were attempted, the combination of measurement inaccuracies and random variability in background concentrations would normally mask the effects of the sources of interest. Therefore, the regulations consider the air quality impact of relatively small sources only in conjunction with the impact of large sources which are proposed for construction.

Best Available Control Technology. In the original proposal, two alternative definitions of Best Available Control Technology (BACT) were discussed. Under both alternatives, a case-by-case review to determine BACT was required of each source for which new source performance standards were not applicable. Under the first alternative, the attainment of NSPS was determined to be equivalent to application of BACT for all sources except for sulfur dioxide emissions from fossil fuel-fired steam electric power plants: for these plants a case-by-case review was required to determine if emissions could be reduced to below NSPS. Under the second alternative, fossil fuel-fired steam electric power plants were treated like all other sources for which NSPS are applicable.

In the regulations proposed herein, the second alternative is incorporated: power plants would not be subjected to the special BACT review because requiring such a review might arguably be inconsistent with the Congressional intent of requiring national standards of performance for new sources. Further, the requirement for application of BACT for control of hydrocarbons, oxides of nitrogen, and carbon monoxide has also been deleted because this requirement was inconsistent with the restriction (explained below) of these regulations to particulate matter and sulfur dioxide.

Procedures for Resolving Jurisdictional Disputes. In the notice of proposed rule-

making, it was noted that the regulations could result in inequitable growth potential along State boundaries because a source approved for construction in one State could "use up" much or all of the growth potential of another. The transport of pollutants across State lines was a major issue raised by the States which filed amicus curiae briefs in the original litigation.

The regulations herein would require that a State notify an adjacent State at any time that it is reviewing a proposed source which could affect air quality in the adjacent State. It is anticipated that States will arrange bilateral and multilateral procedures to resolve differences. It is not appropriate to place the Administrator in the role of arbitrator in interstate disputes because he would have no criteria on which to base his decisions. The Environmental Protection Agency can and will provide technical assistance and make findings of fact; but, if the differences cannot be resolved, relief should be sought through the courts. The 1972 Supreme Court decision in *Illinois vs. City of Milwaukee* may provide a particularly effective mechanism for resolving such interstate differences. The Court held that the Federal District Courts would apply a Federal "common law", based on equitable "nuisance" principles, to require one State to terminate unreasonable pollution affecting another.

Effective Date for Source Review. The initial proposals stated that the regulations would be effective as of the date of initial proposal. It has become apparent that such a date would place an inequitable burden on sources which had commenced construction during the period from July 16, 1973 (the date of initial proposal) to the actual promulgation, because during that time these sources have had no knowledge regarding which of the alternative plans would be promulgated, and hence have had no knowledge of the criteria which would be imposed.

The regulations herein would be effective upon promulgation, but apply only to sources for which construction or expansion is commenced after six months subsequent to the date of promulgation. For these regulations, "commenced" is given the same definition as in 40 CFR 60 concerning applicability of New Source Performance Standards.

The intent of this provision is to avoid severe disruption of sources which are in the final planning and review process at the time of promulgation. If the regulations were applied to these sources they would be required, in many cases, to re-plan and re-enter the review process to comply with the significant deterioration criteria, and it is considered unlikely that any major environmental benefits would be gained. Additionally, the regulations require rather extensive review procedures to be developed either by the States or by EPA, and the requirement to delegate the Administrator's authority to those States which are willing to implement these regulations directly will also require time. Accordingly, the six-month time period is intended to allow

sufficient time to initiate and develop adequate review procedures, and actually accomplish the necessary review, without imposing a moratorium on construction of new sources.

DISCUSSION OF ADDITIONAL PUBLIC COMMENTS

Substantial public comment was received suggesting that the proper course of action would be to request legislative relief from the Congress, i.e., remove from the Clean Air Act the basis for the Court's finding of a requirement to prevent significant deterioration of air quality. Congressional debate and consideration of this issue is currently underway, and will continue; however, the Courts have ordered the Administrator to prevent significant deterioration under the Clean Air Act as presently enacted, and the regulations proposed herein are intended to accomplish that objective in a manner which is in the best interest of the public.

Substantial public comment was also received indicating that additional pollutants (specifically the "automotive pollutants") should be included in the regulations. After careful consideration of the arguments, the Administrator has concluded that ongoing programs are adequate to prevent any significant deterioration due to sources of carbon monoxide, hydrocarbons or nitrogen oxides for the following reasons:

First, the Federal Motor Vehicle Emission Standards are expected to result in sizeable reductions in emissions of those pollutants on an area-wide basis for many years into the future.

Second, a basic requirement for sources under the enclosed concept is the application of Best Available Control Technology (BACT). This level of technology is already required on automobiles in order to comply with the Motor Vehicle Emission Standards, and further actual area-wide emission reductions under the enclosed regulations would be impractical.

Third, carbon monoxide has no identifiable or noticeable effects at concentration levels below the current standards. Unlike TSP and SO₂, it has no observable esthetic impact. Since there are no suspected effects at levels below the standards, it is not reasonable to consider those levels to be "significant."

Fourth, hydrocarbons and oxides of nitrogen are precursors to photochemical oxidants and nitrogen dioxide, but the transformation from the former to the latter takes place over a relatively long time period. It is possible for local concentrations of vehicular activity to result in increased localized emissions of hydrocarbons and oxides of nitrogen, but by the time these emissions are transformed into photochemical oxidants and nitrogen dioxide, the resultant pollutants would be dispersed over a wide area. The motor vehicle emission standards are intended to reduce area-wide concentrations of these pollutants, and no area-wide significant deterioration is expected to result from localized increased vehi-

cular activity [i.e., the effect of area-wide emission reductions would overwhelm any effect of localized emission increases except as already provided for in the indirect source regulations (38 FR 15836, 39 FR 7270)]. Further, the source-receptor relationship of these pollutants is difficult to define other than highly urbanized areas, particularly when only a single isolated source is involved, and hence the procedures appropriate for analysis of SO₂ and TSP would be inappropriate for analysis of hydrocarbons and oxides of nitrogen. However, it may become desirable to control deterioration due to these pollutants, as well as due to possible additional pollutants for which national standards might be set in the future: If this occurs, appropriate revisions to these regulations would be made.

Other Plans Proposed. Some of the public comments received contained alternative proposals by which significant deterioration could be defined and prevented. Most of these proposals were relatively minor variations on one or more of the four proposed alternatives. However, a few groups developed comprehensive plans which differed in concept from the plans proposed by the Administrator.

1. The Sierra Club Plan.—The Sierra Club and many other environmental groups advocated a volume averaging approach in which concentrations of pollutants are limited not by ground level measurements, but rather by an average concentration through a spherical space measured within a one kilometer radius from the top of the stack. This plan represents an entirely different concept from the approach used for attainment and maintenance of ambient air quality standards and would require implementation of a unique set of procedures.

As discussed in preceding sections, current air quality monitoring techniques are marginally accurate at low ground level concentrations. The monitoring required by the Sierra Club plan is even less precise, requiring instrumented aircraft and remote sensing devices which are currently of very limited availability. The diffusion modeling required by the proposal in very clean areas is relatively simple. However, in multiple source areas where it would be desired to take into account emissions from existing sources, the capability does not exist to perform the type of modeling required.

In addition to the difficulties of implementing a volume averaging plan such as proposed by the Sierra Club, the economic impact of the Sierra Club plan would be extremely severe. The type of control technology assumed by the plan's authors is not generally available, and will not be available in the near future. Use of the Sierra Club plan would greatly inhibit increased utilization of U.S. coal reserves and could possibly, through restrictions on emissions of oxides of nitrogen, essentially preclude the use of fossil fuel for power production in large new sources. However, irrespective of the potentially adverse impact of this plan

on the Nation's welfare, the plan contains a major conceptual problem: that is, if implemented, the plan would force the use of air pollution considerations as the single overriding factor in land use decisions, with no provisions allowed for other environmental, social, or economic considerations.

2. The NRDC Plan.—The Natural Resources Defense Council (NRDC) proposed a per capita emission plan. Under this plan the total emissions in clean areas, plus a five percent increase, would be divided by the total population in clean areas to arrive at the allowed per capita emissions. The total emissions allowed in any area would then be calculated as (the population in the area) times (the per capita emission rate). The primary advantages claimed for this proposal are the emphasis on emissions rather than air quality, and the relationship between the level of emissions and the population served. The latter advantage cited by NRDC would in many cases represent a major disadvantage. Because part of the motivation to prevent significant deterioration is concern for currently unquantified but suspected low level effects, it does not seem reasonable to force new polluting development to locate in areas of high population.

This plan would tend to prevent development of currently needed natural resources such as low sulfur coal and oil shale which are located in areas of very low population. In addition, the location of many other facilities such as smelters, paper mills, phosphate rock processing, and oil shale retorting are determined by the location of natural resources, not by the population served. Under the per capita emission plan it is unlikely that facilities such as these could be built.

The Administrator has given careful consideration to all of the advice, comments, and suggestions which have been offered in support of this rulemaking activity and recognizes and appreciates the time and effort which has been expended by a large number of organizations and individuals. This extensive public participation has been of inestimable value in the development of the regulations which are proposed herein.

There are several questions on which EPA is particularly interested in receiving public comments and relevant data. These include the adequacy of State and local resources to implement the regulations, the interface of these proposed requirements on State and local governments with other Federal and State programs such as the Rural Development Act, and the appropriateness of the air quality increments associated with Class II areas.

Written comments in triplicate may be submitted to the Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attn. Mr. Padgett. All relevant comments received not later than September 26, 1974 will be considered, and receipt of comments will be acknowledged. Comments received will be available for public inspection.

tion during normal business hours at the Office of Public Affairs, 401 M St., S.W., Washington, D.C. 20460.

These regulations are being proposed pursuant to an order of the U.S. District Court for the District of Columbia Circuit in the case of *Sierra Club et al. vs. Administrator of EPA*, issued May 30, 1973, case number 72-1528 (344 F. Supp. 253). This notice of proposed rulemaking is issued under the authority of section 301(a) of the Clean Air Act as amended (42 U.S.C. 1857g(a)).

Dated: August 15, 1974.

JOHN QUARLES,
Acting Administrator.

Subpart A, Part 52, Chapter I, Title 40, Code of Federal Regulations, is proposed to be amended as follows:

Section 52.21 is revised by designating the first paragraph (a) and adding paragraphs (b), (c), (d), (e), and (f) to read as follows:

52.21 Significant deterioration of air quality.

(a) *Plan Disapproval.* Subsequent to May 31, 1972, the Administrator reviewed State implementation plans to determine whether or not the plans permit or prevent significant deterioration of air quality in any portion of any State where the existing air quality is better than one or more of the secondary standards. The review indicates that State plans generally do not contain regulations or procedures specifically addressed to this problem. Accordingly, all State plans are disapproved to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States where air quality is now better than the secondary standards. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For purposes of this section:

(1) The phrase "baseline air quality concentration" refers to both sulfur dioxide and particulate matter and means the sum of ambient concentration levels existing during 1973, those future concentrations estimated to result from sources granted approval for construction or expansion but not yet operating prior to the effective date of this paragraph, and all other concentration increases estimated to result from new sources operating between January 1, 1974, and the effective date of this paragraph. These concentrations can be measured or estimated where appropriate for the area of impact and for all time periods covered by the defined increments. In the case of the maximum three-hour and twenty-four hour concentrations, only the second highest concentrations should be considered.

(2) The phrases "expansion" or "expanded source" refer to any source which

intends to increase production through a major capital expenditure.

(3) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.

(4) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal government which administers federally-owned land, including public domain lands.

(5) The phrase "lands of exclusive federal legislative jurisdiction" means lands over which the federal government has received, by whatever method, all governmental authority of the State, with no reservation made to the State except the right to serve process resulting from activities which occurred off the land involved.

(6) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(7) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(8) "Construction" means fabrication, erection, or installation of an affected facility.

(9) "Commenced" means that an owner or operator has undertaken a continuous program of construction or expansion or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or expansion.

(c) *Area designation and deterioration increment.* (1) This paragraph applies to all States listed in Subpart B through DDD of this part and to all lands of exclusive federal legislative jurisdiction and Indian Reservations.

(2) (i) For purposes of this paragraph, areas designated as Class I or Class II shall be limited to the following increases in pollutant concentrations over baseline air quality concentration:

Area designations		
Pollutant	Class I ($\mu\text{g}/\text{m}^3$)	Class II ($\mu\text{g}/\text{m}^3$)
Particulate matter:		
Annual geometric mean.....	5	10
24-hour maximum.....	16	30
Sulfur dioxide:		
Annual arithmetic mean.....	2	15
24-hour maximum.....	5	100
3-hour maximum.....	26	700

(ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.

(3) (i) All areas are designated Class II as of the effective date of this paragraph. Any redesignation shall be determined by the respective States, Federal Land Managers, or Indian governing bodies, as provided below, subject to approval by the Administrator.

(ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator.

(iii) For lands owned by the Federal Government other than lands of exclusive federal legislative jurisdiction, the State shall propose a redesignation to the Federal Land Manager. This redesignation shall be submitted for approval by the Administrator, provided that:

(a) The requirements of subdivision (ii) of this subparagraph are complied with,

(b) The Federal Land Manager is in agreement with the redesignator, and

(c) All redesignation of Federal land is carried out in a manner consistent with adjacent State and privately owned land.

(iv) A Federal Land Manager may request that the State redesignate Federal lands, or areas affecting Federal lands, and the State shall proceed in accordance with subdivision (iii) of this subparagraph unless the State determines such redesignation would not be in the best public interest.

(v) In the event that disputes between the State and Federal Land Manager over implementation of subdivisions (iii) and (iv) of this subparagraph cannot be resolved, the Executive Office of the President will designate a classification for the area.

(vi) For lands of exclusive federal legislative jurisdiction, the Federal Land Manager shall be responsible for redesignation of such lands, and he may submit to the Administrator a proposal to redesignate areas of such lands Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with procedures established in § 51.4 of this part, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s).

(vii) Nothing in this section is intended to convey authority to the States over Indian Reservations where such authority is not granted under other laws. For Indian Reservations, the appropriate Indian governing body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with pro-

cedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s) and, for those lands held in trust, with the approval of the Secretary of the Interior.

(viii) The Administrator shall approve, within 60 days, any redesignation proposed pursuant to this subparagraph as follows:

(a) Any redesignation proposed pursuant to subdivisions (ii), (iii), or (iv) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) through (iv) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant environmental, social or economic consideration in any redesignation, or (3) that the State has not requested delegation of responsibilities for carrying out this section.

(b) Any redesignation proposed pursuant to subdivision (vi) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vi) of this subparagraph have not been complied with, or (2) that a Federal Land Manager has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations in any redesignation.

(c) Any redesignation submitted pursuant to subdivision (vii) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vii) of this subparagraph have not been complied with, or (2) that an Indian governing body has arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations in any redesignation.

(ix) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian governing body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

(d) *Review of new sources.* (1) This paragraph applies to any new or expanded stationary source of a type identified below in any area designated as Class I or Class II, which has not commenced construction or expansion prior to six months subsequent to the effective date of this paragraph.

(i) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.

(ii) Coal Cleaning Plants (thermal dryers).

(iii) Kraft Pulp Mill Recovery Furnaces.

(iv) Portland Cement Plants.

(v) Primary Zinc Smelters.

(vi) Iron and Steel Mill Metallurgical Furnaces.

(vii) Primary Aluminum Ore Reduction Plants.

(viii) Primary Copper Smelters.

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(x) Sulfuric Acid Plants.

(xi) Petroleum Refineries.

(xii) Lime Plants.

(xiii) Phosphate Rock Processing Plants.

(xiv) By-Product Coke Oven Batteries.

(xv) Sulfur Recovery Plants.

(xvi) Carbon Black Plants (furnace process).

(xvii) Primary Lead Smelters.

(xviii) Fuel Conversion Plants.

(xix) Sintering Plants.

(2) No owner or operator shall commence construction or expansion of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

(i) The effect on air quality concentrations of the source or expanded portion of the source considered with the effect on air quality concentrations of all other new and expanded sources subject to this paragraph and the estimated changes in air quality caused by general commercial, residential, industrial and other growth in the area affected by the proposed source since the date of promulgation of these regulations will not cause the air quality concentration in any area to be increased above the limits shown in paragraph (c) (2) of this section.

(ii) For sources for which standards of performance for new sources have not been proposed under part 60 of this chapter, the source or expanded portion of the source will apply and operate the best available control technology for minimizing emission of particulate matter and sulfur dioxide. In determining best available control technology for each new or expanded source subject to this section, the Administrator shall consider the following:

(a) The process, fuels, and raw material available and intended to be employed.

(b) The engineering aspects of the application of various types of control techniques.

(c) Process and fuel changes.

(d) The cost of the application of the control techniques, process changes, alternative fuels, etc.,

(e) Any applicable State and local emission limitations, and

(f) Locational and siting considerations.

(3) In making the determinations required by subparagraph (2) of this paragraph, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, any other information necessary to determine compliance with any ap-

plicable standards of performance for new sources specified in Part 60 of this chapter or any other applicable emission regulations, and the impact that the construction or expansion will have on sulfur dioxide and particulate matter air quality levels. In addition, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial and other growth which has occurred in the area affected by the source's emissions since the effective date of this paragraph and the estimated impact of such development on ambient concentrations of particulate matter and sulfur dioxide.

(4) (i) Where a new or expanded source is located on Federal lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.

(ii) New or expanded sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior.

(iii) Whenever any new or expanded source is subject to action by a Federal agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.

(e) *Procedures for Public Participation.* (1) (i) Prior to making the determinations required by paragraph (d) of this section, the Administrator, within 30 days after submittal of an application by the owner or operator, shall provide opportunity for public comment on the information submitted by the owner or operator, on the owner or operator's analysis of the effect of such construction or expansion on ambient air quality and the Administrator's proposed approval or disapproval of the owner or operator's application. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the area affected by the source's emissions of the information submitted by the owner or operator, and the Administrator's analysis of effect on air quality.

(b) A 30 day period for submittal of public comment, and

(c) A notice by prominent advertisement in the area affected by the source's emissions of the location of the information and analysis specified in paragraph (d) of this section.

(ii) A copy of the notice required under this subparagraph (e) (1) shall be sent to officials and agencies having cognizance over the location where the source will be situated, as follows: State and local air pollution control agencies, the chief executives of the city and county; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian governing body whose lands will be significantly affected by the source's emissions.

(iii) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. All comments shall be made available for public inspection in at least one location in the area in which the source would be located.

(iv) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for approval or denial. Such notification shall be made available for public inspection in at least one location in the area in which the source would be located and shall include the conditions under which the source shall operate. These conditions shall include but shall not be limited to specifications of the allowed emission rate and/or the design and operating characteristics of the control equipment required on the source and any reporting requirements as determined by the Administrator.

(v) The Administrator may extend each of the time periods specified in subdivisions (i), (iii), or (iv) of this subparagraph (e) (1) by no more than 30

days, or such other period as agreed to by the applicant and the Administrator.

(2) Any owner or operator who constructs or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or expansion six months after promulgation of this regulation without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.

(3) Approval to construct or expand shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.

(4) Approval to construct or expand shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State and Federal regulations which are part of the applicable State implementation plan.

(f) *Delegation of Authority.* (1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e) of this section, in accordance with subparagraphs (2), (3), and (4) of this paragraph (f).

(2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the agency designated is not

an air pollution control agency, such agency shall consult with the appropriate State or local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for land use planning, such agency shall consult with the appropriate State or local land use planning agency prior to making any determination required by paragraph (d) of this section.

(ii) A copy of the notice pursuant to paragraph (e) (1) (i) (c) of this section shall be sent to the Administrator through the appropriate regional office.

(3) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or expanded sources which are owned or operated by the Federal government or for new or expanded sources located on Federal lands; except that, with respect to the latter category, where new or expanded sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal Land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.

(4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be redelegated, other than to a regional office of the Environmental Protection Agency, for new or expanded sources which are located on Indian reservations.

[FR Doc. 74-19340 Filed 8-26-74; 8:45 am]